



## Keeping Watch

Perched atop a high coastal bluff, washed by a fresh ocean breeze and watched only by soaring hawks, visitors to today’s Golden Gate National Parks take advantage of some of northern California’s most spectacular views of sky and sea. But not so long ago, these vantage points were used by the US Army to protect and defend our country against threats of foreign invasion. Now, the National Park Service returns the favor by preserving and interpreting a veritable outdoor museum of seacoast defensive fortifications, as well as providing “safe harbor” for plants, animals, and city-weary citizens. For more details, start with the article “Seacoast Defense at the Golden Gate” on page 3.

### From the Superintendent

Seacoast defense means different things to different people: to military historians, it conjures images of gun batteries and missiles; to beachgoers, it means saving the shoreline; to imperiled sailors, it means the Coast Guard. No matter how *you* define it, you’ll find something of interest in this issue.

Today’s Golden Gate National Parks owe much to the military’s efforts to defend the West Coast and the San Francisco Bay Area from attack. As threats of foreign invasion lessened, military technology improved, and these defenses were no longer needed, the batteries, forts, wharves, and the open land they occupied were transferred to the National Park Service.



Although preservation of open space was not the army’s historic mission, it is nevertheless true that without the military use of these Golden Gate headlands—with their wonderful views—

the land would have long since become cities and suburbs. Much of our modern coastal open space is the unintended consequence of a century and a half of fortification.

Our collection of defense works is possibly the most numerous and varied of any in the United States. In fact, our visitors can see an example of almost every type of seacoast defense built by

[Continued on Page 2]

### “Coasties” on the Alert

Small in number but large in dedication, the US Coast Guard carries on a long tradition of service to the security of mariners and the nation.

4

### Mythology, History, and the Cold War

Missiles in Marin? Yes, and in San Francisco, San Mateo, and Contra Costa as well. One of these formerly secret sites is now used to educate Bay Area schoolchildren.

6

### Preserving and Protecting Ocean Beach

The sea gives and the sea takes away—defending the coast takes on a new meaning at Ocean Beach.

7

Inside: Park Programs pullout calendar & “Seasonal Sights”





# Behind the Scenes

Golden Gate National Recreation Area consists of over 75,500 acres of land, and protects more than 1,250 historic structures, 27 rare and endangered species, and many small “islands” of threatened habitat. NPS staff, volunteers, and partners work hard to take care of the park’s treasures for the millions of people who visit each year, and for future generations.

## Protecting the Coast

A few years ago, park historians Stephen Haller and John Martini wrote a report on the Nike Missile Site SF-88L. The title of the report, “What We Have, We Shall Defend,” could easily have been applied to this issue, which focuses on some of the meanings of the term “seacoast defense”: protecting the country from attack; protecting the beachfront from its urban neighbors (and vice-versa); protecting citizens from nature’s whims; and protecting historical sites from decay and destruction. Read on for historical and contemporary perspectives.



Battery Cranston, ca. 1910; this Endicott-era coastal fortification featured one of the large, breech-loading “disappearing” guns that were developed in the late 1880s. (PARC)

### Buffalo Soldiers

The graves of nearly 400 Buffalo Soldiers lie within the walls of the Presidio National Cemetery. These African-American soldiers were among the first park rangers, and their stories are a key part of US history at the Presidio. To learn more about the legacy of these American heroes, whose record of service and heroism was renowned throughout the army, phone (415) 515-3831.



African-American soldiers at Yosemite, ca. 1899. (PARC)

### Sudden Oak Death Hits Muir Woods

Since 1995, coast live oaks, black oaks, and tanoaks along the West Coast have been dying mysteriously. Sudden Oak

Death (SOD), first identified in Marin County, has since infected twelve coastal California counties as well as trees in Washington, Oregon, Canada, England, and Germany. Our own Muir Woods has been hit too, losing large numbers of tanoaks and associated host plants.

In 2000, researchers at the University of California identified the culprit as *Phytophthora ramorum*, a fungus-like organism; relatives of this “fungus” caused the Irish potato famine. SOD has now killed thousands of native trees and plants and has had an impact on wildlife (habitat and food sources) and humans (standing dead trees are both a fire and falling hazard).

In response, the National Park Service, California Department of Forestry, US Forest Service, University of California, and many other agencies are now participating in the California Oak Mortality Task Force, gathering information on the pathogen and exploring methods of control.

Researchers believe that humans have unintentionally spread the disease. Park visitors can help prevent the spread of Sudden Oak Death by taking

a couple of simple precautions. Hikers and bikers, wash the mud or dirt off your boots, bikes, and car tires as soon as possible (for the latter two, a coin-operated car wash is recommended). If you do not have a way to clean your boots or shoes, bring a clean pair to change into. These precautions will reduce the risk of tracking the disease, which lives in the soil, into uncontaminated areas.

### Teamwork Works!

At 9 AM on the second Saturday of every month, members of the GLS/ San Francisco Bay chapter of the Sierra Club join National Park Service staff and other NPS partner organizations (Americorps, Marin Conservation Corps, and community volunteers) at the Fort Baker parade ground. Here, on the bay side of the Marin Headlands, they work as a team to restore habitat for the federally endangered mission blue butterfly. This tiny butterfly, which requires silver lupine as a host for its eggs, has inspired many to work on its behalf. You can, too—call 561-4447 for information on how you can join the Fort Baker stewardship team.



### Sutro In Love

Sutro Heights may be a hidden jewel among the Golden Gate National Parks, but it inspires strong feelings. Fall in love with it yourself at the “I♥ Sutro Heights Park” work day, Saturday, February 15. Join NPS Gardener Susan LaFranchi-Madonich from 9 AM to 2 PM for a lovely work day in the park, followed by a potluck. Bring gloves and love. Call 556-4256 for more information.



Adolph Sutro opened the gates of Sutro Heights to the public in 1885; visitors were greeted by plaster statues from Belgium, such as the griffin shown in this ca. 1890 photo. (Blaisdell Collection)

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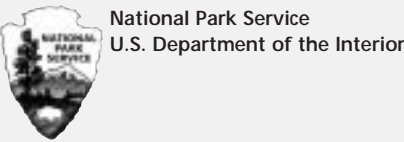
the United States between 1850 and 1970. Visitors would be hard-pressed to leave the GGNRA lands without a strong sense of the phrase “swords to plowshares.”

But seacoast defense is not just part of our past; it’s also part of our present. The US Coast Guard’s Station Golden Gate, a partner during its time at Crissy Field, is once again a partner at its new home at Fort Baker. Our joint training and operations with the Coast Guard have made our search-and-rescue staff among the finest in the National Park Service.

And as this issue goes to print, GGNRA has joined the Ocean Beach Partnership to begin new, cooperative efforts by private groups and public agencies to protect and improve the long-term health of San Francisco’s longest beach.

Come to the coast, then, and relive its past while you enjoy the present. And if you’d like to become part of its future as well, become a volunteer—phone 415-561-4755 to find out how you can help.

  
Brian O'Neill  
Superintendent



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Enjoying the view from the Coastal Trail. (Brenda Tharp)

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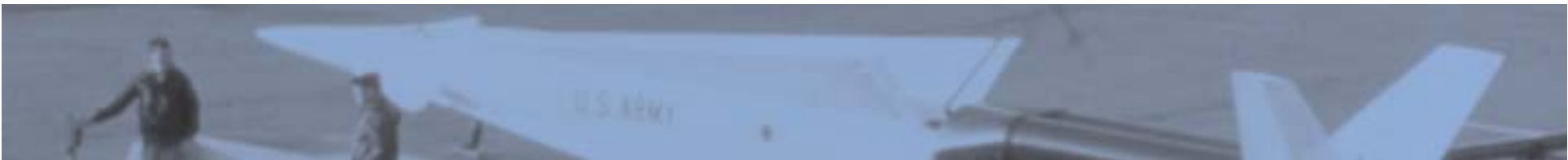
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# Seacoast Defense at the Golden Gate

## Preserving Our Military Heritage

James Osborne, Interpretive Ranger, Presidio

Battery Chamberlin, Baker Beach, 1905. A voice booms a command, and like integral parts of the gun they’re loading, soldiers yank open the breech block (door) at the rear of the barrel and run the seven-foot sponge in and out of the firing chamber. They heave in the shell and powder bag, slam the breech block shut, and trip a lever. The gun springs up on massive arms above the wall behind which it crouches. The sergeant orders “Fire!” and tugs on the long lanyard attached to the rear of the gun.

With a deafening boom, a tongue of flame, and a cloud of smoke, the shell speeds toward the target mounted on a pontoon raft seven miles out to sea. The gun recoils, swinging back and down. Behind the wall, the men stand poised to reload. Sweating in their fatigues, they silently bless the ever-present fog. Thirty seconds have passed.

These were the men of the Coast Artillery, called “concrete soldiers” because their assigned duty posts were massive concrete gun batteries. Their job was to sink enemy ships in the event of an attack by a foreign navy on the US seacoast, and they honored their responsibilities here at the Golden Gate for nearly a century.

**AN ENDURING MISSION**  
Protecting our borders has been a military concern since the earliest days of this country’s existence. The degree to which this protection is taken has been debated for almost as long. Some have felt that a strong defense is the best deterrent to attack, while others considered spending money on weapons that would never be used as a waste of resources. In between these polar positions was—and is—a spectrum of opinion on the issue.

Here in the parks, we have an “outdoor museum” of seacoast defense fortifications that illustrates how important seacoast and harbor defense became to this country as it grew from a fledgling republic into one of the world’s great powers. At the Presidio can be found a Spanish-era cannon that once stood guard on a bluff high above the narrow strait of the Golden Gate. At Fort Point and Alcatraz, Civil War-era armaments can be inspected, and a 1908 gun stands guard at Battery Chamberlin (Baker Beach), lovingly maintained by volunteers. At Fort Mason, Black Point Battery has been restored and a massive Rodman cannon faces the bay as it did more than a century ago. Overall, examples of defensive fortifications

Although they were never challenged, the forts and their soldiers stood as visible symbols of federal power during the Civil War. But an era was ending—brick walls and cannonballs were no match for the rifled guns and ironclad steamships introduced during the war.

**DEFENSIVE TACTICS SHIFT**  
Beginning in the late nineteenth century, the army concentrated on con-

guarding the city and its harbor. They lived in barracks in beautiful park-like forts, and regularly enjoyed the city’s social life.

**THE WORLD AT WAR**  
Throughout the US participation in World War I (1917–1918), Coast Artillery soldiers were on active duty, and the Army Air Service supported the land-based army. Immediately after the war, Crissy Field came into being, and its WWI-era planes and pilots rapidly expanded the role of aircraft in seacoast defense.

The December 7, 1941, attack on Pearl Harbor brought the country into World War II, and the Harbor Defense (HDSF) soldiers manned their guns and observation posts around the clock. For seven months, Japanese successes in the Pacific kept the soldiers wondering if their guns, mines, and antiaircraft batteries were about to get a true test. And while the shelling of the southern California and Oregon coasts by Japanese submarines did little damage, it helped spread panic. After the US victory at Midway in June 1942, tensions eased somewhat on the West Coast, and the “concrete soldiers” settled in to a less highly charged routine for the remainder of the war.

As World War II ended in 1945, once again, US seacoast defense strategies were rendered obsolete—coast artillery couldn’t stop carrier-based aircraft or amphibious assault on unprotected beaches. After the war, the Coast Artillery Corps was disbanded and most of the guns destroyed. Radar became our “eyes on the sky,” and Nike missiles our defensive weapons of choice throughout the Cold War (see the article on p. 6 for more on this subject).

**PRESERVING THE PAST FOR THE BENEFIT OF THE FUTURE**  
We dedicate time and resources to the preservation and interpretation of these fortifications in an effort to meet the larger goal of historic preservation: to “keep all the pieces” so that citizens can experience the words, deeds, and products of their predecessors. This process, which provides context, contributes to the making of informed judgments and opinions. As you enjoy the park, consider these issues, and think of the soldiers who stood guard at the guns, watching for threats to our safety.



Coast artillerymen man a camouflaged gun at Baker Beach’s Battery Chamberlin, ca. 1941. This battery was also home to a base-end station, an observation post from which data was compiled and sent to a central location, where it was converted to precise aiming instructions for the big guns. (PARC)

spanning more than two centuries—1776 through the Cold War—can be seen throughout the parklands.

**SECURING THE COASTLINE**  
In the San Francisco Bay Area, the first seacoast fortification was a manifestation of Spanish rather than American growth. The Castillo de San Joaquin was built in 1794 at the top of a tall bluff overlooking the entrance to the bay. When its adobe walls were torn down sixty years later, six of its cannon, some of the oldest in the nation, were saved (and are on display today at the Presidio).

When the US took possession of California and the Gold Rush made San Francisco a rich target, the defense of its great harbor became a priority. Fort Point was among the bay’s earliest defensive fortifications. The army tore down the *castillo*, cut the bluff down to water level, and constructed a brick fortress at the narrow mouth of the Golden Gate. Artillery soldiers on its four levels could bring nearly a hundred cannon to bear on an enemy sailing into the bay. Almost simultaneously, barren Alcatraz Island was fortified with a ring of terraced gun batteries that mounted a hundred more cannon for inner harbor defense.

struction of “land” forts, large reservations at harbor entrances. Concrete batteries mounted rows of heavy rifled guns, and defense systems grew more complex, with shore-controlled minefields and increasingly accurate means of targeting. After the turn of the century, a system of fire control was developed using remote observation posts and telephone communications, and accuracy to 10 miles or more became possible.

At the Golden Gate, the army established Fort Winfield Scott on the seaward side of the Presidio, as well as Forts Miley and Funston to the south and Forts Baker, Barry, and Cronkhite to the north (Marin Headlands side) of the strait. By 1939, there were more than 35 batteries; in excess of \$2 million had been spent on these batteries, exclusive of armament, an investment that in today’s dollars equals close to \$50 million.

Within the armed services, the Coast Artillery was becoming a progressively more specialized branch of the army. The Coast Artillery soldiers assigned to San Francisco—where even the best-planned target practice or war game was often postponed by fog—enjoyed relative comfort and prestige





# “Coasties” on the Alert

## A Long Tradition of Homeland Security

By Michael L. Johnson Jr., USCG Motor Lifeboat Station Golden Gate

What happens when criminals need to be rescued? On October 1, 2002, the United States Coast Guard Station Golden Gate responded to a possible rescue situation off China Beach after National Park Service rangers notified the Coast Guard that a man fleeing law enforcement had marooned himself on an offshore rock.

Within minutes, two Coast Guard motor lifeboats and a Coast Guard helicopter were on scene. The man was unhurt but in danger. NPS lifeguards, dispatched from Ocean Beach, carefully guided the stranded man onto the waiting Coast Guard vessel, where he was arrested and then treated for hypothermia during transit to a nearby pier. This unique blend of search and rescue and law enforcement typified the Coast Guard’s decades of service to the Bay Area.

### AN EVER-WIDENING MISSION

As artillery cannon and Nike missiles defended the coast, the US Lifesaving Service and its military successor, the US Coast Guard, worked to save shipwreck victims and others whose lives were threatened in or by the sea. Today, the Coast Guard’s mission has broadened in ways few could have imagined only a decade ago.



The US Lifesaving Service relied on sturdy wooden boats and courageous surfmen to save those at peril in the sea; these men were stationed at Point Bonita. (PARC)

During peacetime, the Coast Guard is under the command of the Department of Transportation, and during wartime, the Department of the Navy. Congress will soon decide whether the Coast Guard will join the proposed Homeland Security Department and accept yet another duty. Since the attacks of September 11, 2001, the Coast Guard has participated in homeland security patrols, providing additional security for the high vessel traffic transiting the bay and increasing its maritime law enforcement presence in our nation’s ports and on its waterways and oceans.



Fort Baker, the latest “post to park” conversion, provides the US Coast Guard with a sheltered harbor and easy access to both the bay and the ocean. Tucked into the coastline on the bay side of the Golden Gate, Fort Baker has a history of coastal defense that dates back to 1873. (Brenda Tharp)

### SMALL IN NUMBER, LARGE IN DEDICATION

The Coast Guard is the smallest of the five armed services, fulfilling its mission with approximately 35,000 active-duty officers and enlisted members—less than the NYPD. Most of the “Coasties” at Station Golden Gate are active duty, enlisted military members. There is also a large reserve force that drills and augments the station on week-ends and during times of national emergencies. Finally, the station has a dedicated auxiliary flotilla staffed by civilians who provide their time and skills to help Station Golden Gate perform everyday missions.



### Point Bonita and Mile Rock. MEETING THE BAY’S CHALLENGES AND MARINERS’ NEEDS

San Francisco Bay—with its shifting sand bars, jagged rocks, strong currents, and infamous “Potato Patch”—has earned its reputation as one of America’s worst maritime graveyards. In order to work effectively in these conditions, the Coast Guard has designed some extremely hardy boats. Station Golden Gate is a Motor Lifeboat Station equipped with two 47-foot Motor Lifeboats (MLB) and a 21-foot Rigid Hull Inflatable Boat. The MLB can operate in 50-knot winds, 30-foot seas, and 20-foot breaking surf; if capsized, it will right itself and keep running. The MLB functions in search-and-rescue as well as law enforcement operations, and can tow a vessel many times its own size safely into port.

The Coast Guard crew that runs these new boats is highly trained—specialties include Coxswain, Engineer, Crewmember, Boarding Officer, and Emergency Medical Technician. After mastering techniques used to maneuver the 47-foot MLBs in heavy surf conditions, a Coxswain can become qualified as a Surfman. The Coast Guard’s approximately 75 Surfmen continue a time-honored tradition

that dates back to 1878 and the US Lifesaving Service.

“Coasties” are busiest during the summer months, when they conduct about 500 SAR cases and 100 law-enforcement boardings, many in conjunction with the National Park Service and other agencies. (Coast Guard personnel have law enforcement authority, and may board suspicious vessels or assist Alcatraz rangers with unruly visitors.) Winter weather brings fewer recreational jaunts, but the stakes are higher for those in trouble. SAR cases typically involve mariners suffering mechanical or navigational problems or windsurfers driven off-course by unusually gusty winds. Strong currents and unpredictable weather can require Coast Guard assistance with distressed swimmers, hikers lost or stuck on coastal cliffs, or people



The modern Coast Guard, with its vastly improved technology and modern, hardy boats, continues to rely on the skill and courage of its highly trained “Coasties.” (USCG)

swept under at the Golden Gate Bridge. As the Coast Guard grows for the future, it will also retain the traditions of its past, continuing to aid boaters in distress and to protect our marine environment. Coastal defense lives on.





# Seasonal Sights

## Winter in the Golden Gate National Parks

Tim Doherty, Habitat Restoration Intern

“Take a course in good water and air, and in the eternal youth of Nature, you may renew your own.”

—John Muir



Turkey's tails, Muir Woods (Brenda Tharp)

Winter solstice—December 21—marks the shortest day of the year and the Earth's greatest distance from the sun. The season's cold, short days influence the park's flora and fauna in interesting ways. So, whether you choose to brave the rain or wait for sun, be sure to go outside and experience the way weather works its wonders!

- Grey whales heading south to their winter calving grounds in Baja California can be seen offshore from the Marin Headlands to Mori Point.
- Watch harbor seals below Point Bonita, then head north to Point Reyes National Seashore to see a breeding colony of elephant seals.
- Waterfowl avail themselves of the park's mild climate and numerous resting spots.



- Seasonal visitors include the bufflehead, greater scaup, and red-breasted merganser. Watch for the distinctive black-and-white head of the male bufflehead as it surfaces from a dive. Catch a glimpse of them in the Crissy Field and Rodeo lagoons.
- Wildflowers and other native plants bloom even in winter. The aptly named “Christmas tree berry,” or toyon, is ablaze with its red berries, and yellow-red osoberries are ripening to purple. Both fruits are important sources of food for birds and insects within the park.
  - Deciduous trees are almost leafless now, including the still-toxic poison oak. However, the uniquely summer-deciduous California buckeye tree is responding to rains by sending out new leaves while other trees are shedding theirs.
  - The parks' diverse soil types are home to a spectrum of life forms, many of which re-awaken with

- winter rain. Fungus species—visible by their above-ground fruiting bodies (that is, mushrooms)—begin breaking down leaf material accumulated over the year. On tree branches and above ground, mosses and lichens also use these rains to begin new growing cycles.
- And as winter rains refill Redwood and Lagunitas creeks, steelhead trout and coho salmon, both of which are seasonal residents of the Pacific Ocean, await the breaking of the sand bar at Muir Beach to begin their annual spawning migration to the creeks' headwaters.



# DO YOU ENJOY THE PARKS? JOIN US!

### THE GOLDEN GATE NATIONAL PARKS ASSOCIATION—OUR MISSION

The mission of the Parks Association is to engage the community in the preservation, education, enjoyment, and improvement of the Golden Gate National Parks. A nonprofit organization founded in 1981, we support the National Park Service by enlisting volunteers to restore native habitats, publishing educational materials about the parks, funding and managing projects to improve park open space and landmarks, supporting scientific studies, and establishing visitor centers.

Over the course of two decades, the Association has provided the National Park Service with more than \$64 million in aid. The Association's funding sources include contributions from more than 12,000 individual members, foundations, and corporations, as well as income earned from book publishing and audio tours.



More than ever before, the Golden Gate National Parks need the support of people like you. By joining the Association—the parks' non-profit partner—you'll become part of the effort to preserve the national parks at the Golden Gate.

Your support helps restore native habitats, maintain miles of trails, preserve historic landmarks, and develop park education programs for young people.

Join the Parks Association and you'll receive:

- ◆ Two membership cards plus a special gift.
- ◆ *Gateways*, the quarterly membership newsletter filled with news of the parks and tips on special places.
- ◆ *ParkAdventures*, the quarterly calendar of NPS and special membership programs and events, delivered to your home.
- ◆ Free monthly email newsletter.
- ◆ Invitations to members-only walks, talks, and excursions.
- ◆ Discounts at park bookstores.
- ◆ Free use of the Alcatraz and Fort Point audio tours.

Yes, I would like to join the Parks Association. Enclosed is my membership contribution of:

- ☐ \$35 Park Partner — Receive the award-winning book, Guide to the Parks  
☐ \$50 Park Sponsor — Receive a cotton twill cap  
☐ \$100 Park Steward — Receive an all-cotton sweatshirt
- Donations are tax-deductible. For information, visit our website [www.ggnpa.org](http://www.ggnpa.org). To join by phone, call the Parks Association at (415) 561-3000.

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# Mythology, History, and the Cold War

## A Look at the Bay Area’s Atomic Past

Rik Penn, Interpretive Ranger, Presidio  
In memory of Col. Milton “Bud” Halsey

“If we are to reach real peace in this world, and if we are to carry on a real war against war, we shall have to begin with children.”  
—Mahatma Gandhi

They were our coast’s last line of defense against the enemy. They were secretly placed in and near urban centers and pointed into the skies of Marin, San Francisco, and San Mateo counties. And, at the end of their active lives, they carried nuclear payloads. “They” were Nike missiles, and today they play a more benign role in the education of Bay Area children.

Supersonic, surface-to-air, radar-guided, and stored in underground magazines, the Nike missile was the precursor of America’s modern defense system. Built in response to the threat of the Soviet Union’s long-range, nuclear-capable bombers, the Nike-Ajax and Nike-Hercules systems were sited in nearly 300 locations around the country.

The strategically vital Bay Area was protected by Nike systems at Lake Chabot, Coyote Hills, Rocky Ridge, San Pablo Ridge, Angel Island, and San Rafael, among others. And in what are



Highly trained soldiers operated some of the most technologically sophisticated defensive weaponry of the Cold War at Nike missile stations. Today, this equipment seems large and cumbersome when compared with modern information systems. (PARC)

today known as the Golden Gate National Parks, scattered skeletons of these Cold War mainstays can be found at Milagra Ridge, Fort Funston, the Presidio, and in the Marin Headlands.

**MYTHOLOGY MEETS THE ATOMIC AGE**  
Following World War II, the army developed and named their newest weapon “Nike,” in honor of the Greek goddess of victory. The first Nike system was dubbed Ajax, after a mythological Greek warrior. Nike-Ajax missiles, though physically imposing and capable of chasing targets to 70,000 feet at speeds of 1,600 mph, were hampered by their relatively short range of 25 miles. Defenders of the early Nike systems maintained that the system’s best attribute was that the missiles were actually on the ground and ready for deployment—faint praise indeed. By 1958, the army had completely revamped the Nike, and the Nike-Hercules was born. The vastly increased range and speed of the new missile system was made even more significant by its payload: atomic weapons. The system’s extended reach meant that fewer sites were needed, and the army closed down some of its urban Nike installations—those at the Presidio and Fort Funston were mothballed in the early 1960s.

Nike-Hercules systems remained in the Bay Area until President Nixon signed the Strategic Arms Limitation Treaty (SALT) in 1974. In a provision

that must have been viewed with skepticism at the time, SALT allowed each country to keep some installations as museums. Today, in the herb-scented hills of the Marin Headlands, volunteer US Army veterans honor their service and the SALT treaty by restoring and maintaining the only fully restored Nike missile site in the nation. Now, Nike site SF-88L launches peaceful discussions and debates about Cold War history.

**COLD WAR CLASSROOM**  
Open to the public and staffed by volunteers, Nike site SF-88L provides visitors with a chance to see a refrigerator-sized computer system, a vacuum tube bigger than a milk bottle, and, of course, forty-foot missiles in an underground magazine. Yet, the Nike site is much more than military hardware or a reminder of times past. It serves as a constant reminder of the need to find diplomatic solutions to international conflicts.

Not every visitor gets the message right away: an eight-year-old searches for a cartoon Hercules and his Nike cross-trainers. As students gather at the missile site, an army veteran with

first-hand memories of the Cold War sets the historical scene by playing a sound track of the Nike era: Chuck Berry and Elvis for the fifties, Motown and the Beatles for the sixties, and Disco for the seventies. Once the “age” of the missile site is conceptualized, visitors see a video montage of American life during the Nike era. Elementary and middle-school classes may laugh at the “old” songs and clips, but they also gain insight into the culture of the Cold War.

To be sure, parallels can be drawn between the Nike era and today. The Nike site is a manifest remnant of a time when the threat of annihilation was a family affair, when door-to-door salesmen hawked fallout shelters. Today, many Americans again feel vulnerable, and modern anxiety entrepreneurs peddle gas masks and Cipro. But it’s worth noting that Americans both then and now tend to reject hysteria.

Perhaps Nike, the Greek goddess of victory, secretly decreed that truest measure of victory would be that none of her namesakes were fired in anger. And through the life of the Nike missile sites, none ever were.



Nike Ajax (shown here ca. 1961) and Hercules missiles were raised from the magazine where they were stored to the launcher on an elevator platform. Once on the launcher, they could be raised into firing position. Today at the restored Nike Missile Site 88 in the Marin Headlands, visitors can see a reenactment of this process. (PARC)

For more information on the Nike Site and the Cold War, see:  
Patricia Leigh Brown, “Week in Review,” *New York Times* 12/23/01  
Jeremy Issacs and Taylor Downing, *Epilogue: What the Cold War Cost*  
Stephen Haller and John Martini, *What We Have We Shall Defend*  
Mark L. Morgan and Mark A. Berhow, *Rings of Supersonic Steel*  
Howard Zinn, *A People’s History of the United States*

Video Resources:  
“Atomic Café” (feature documentary)  
“The China Syndrome” (science-fact)  
“Dr. Strangelove” (feature film)  
“Earth vs The Flying Saucers” (classic sci-fi)  
“The Seeds of The Sixties” (documentary)  
“Silkwood” (feature film based on life of Karen Silkwood)

Web Links:  
[www.nikemissile.net](http://www.nikemissile.net)  
[www.nps.gov/goga/mahe/nimi](http://www.nps.gov/goga/mahe/nimi)  
<http://cwihip.si.edu/cwihiplib.nsf>  
[www.cnn.com](http://www.cnn.com)

Nike Site SF-88  
(415) 331-1453  
John Porter, Site Manager  
Wednesday/Thursday/Friday, and first Sunday of the month, 12:30 to 3:30 PM





# Preserving and Protecting Ocean Beach

## Time and Tide vs. Human Ingenuity

*Jon Gervais, NPS Environmental Protection Specialist,  
and David Montgomery, Environmental Writer*

At the far western edge of San Francisco, Ocean Beach challenges people. Surfers relish and deal with the huge swells and rip currents that curl and twist off its ever-changing shoreline, and locals struggle just to find a clear, calm day for a picnic. But Ocean Beach faces challenges of its own.

**DEBRIS, DRIFT, AND DUNES**  
While the five-mile-long beach remains popular with locals and visitors alike, even a brief examination of its condition reveals the environmental challenges facing its shoreline. Too often, the beach is littered with debris—burned-out logs or pallet nails left after bonfire beach parties, trash, and other ephemera of urban life.

More significantly, powerful natural forces such as winds and storms scour the beach and leave surrounding cliffs vulnerable to collapse. El Niño seasons bring unusually high tides and huge waves, which exacerbate typical erosion and can destroy infrastructure; the parking lots near Sloat Boulevard provide a graphic example of this phenomenon.

The situation is further complicated by the presence of urban infrastructure in the densely populated and travelled area: the beach parking lot, a major city wastewater treatment plant, and the Great Highway, which parallels Ocean Beach. The natural erosion processes at Ocean Beach

have acted over time to expose portions of this infrastructure, sometimes prompting urgent agency responses not fully compatible with maintaining the habitat and recreational values of the beach.



An excavator moves sand onto the beach to prevent cliff erosion, part of the on-going effort to mitigate the ocean's relentless battering of the coastline. (NPS)



An aerial view of Ocean Beach reveals its long shoreline and active wave patterns, as well as its proximity to the densely occupied city. (NPS)



In this postcard-perfect view of Ocean Beach, it's easy to see why the beach is a popular place for locals and visitors alike. However, the wind that sculpted this sand into symmetrical waves against the old esplanade also drives it over barriers and into the parking lot, walkways, and occasionally onto the Great Highway. (Brenda Tharp)

**UP TO THE TASK**  
Faced with these challenges, local citizens came together in partnership with governmental agencies to form the Ocean Beach Task Force (OBTf). Their

goal: to improve the condition of the beach and to seek long-term solutions for its preservation. The Ocean Beach Partnership (OBP) was formed as a natural progression from citizens' group to agency partnership.

Comprising representatives from the original OBTf, the National Park Service, San Francisco's City Department of Public Works and Department of the Environment, and the Army Corps of Engineers, the OBP has the formidable task of developing plans for both immediate help and long-term stewardship of Ocean Beach.

**SANDY SOLUTIONS**  
As part of this effort, the Ocean Beach Partnership is launching programs to reduce the level of debris and garbage on the beach. Additionally, the National Park Service and the City of San Francisco have united to implement a more careful, ongoing monitoring of general beach conditions.

These short-term steps are proceeding in tandem with intermediate and long-term plans. For example, the city is

studying a roadway shift that will move the southbound lanes of the Great Highway into the median south of Sloat Boulevard, somewhat farther from the beach. This will reduce the impact of infrastructure on the beach, and vice-versa. The realignment is also expected to reduce the incursion of sand from the beach onto the roadway.

For the long-term care of the beach, OBP is working with the Army Corps of Engineers to develop solutions for protecting the pipes, parking lots, and other human-created elements at the beach. The idea is to protect their functions while reducing their impact.

No matter how challenging it can be, Ocean Beach clearly deserves protection, preservation, and long-term enjoyment by both wildlife and park visitors. While time and tide may move the sands of Ocean Beach, the concerted efforts of local citizens and government agencies in the Ocean Beach Partnership represent a serious and durable commitment to preserving this special environment for generations to come.

### A Day at the Seaside

Whiling away an afternoon at Ocean Beach got more comfortable in the 1920s with construction of a seawall and a balustraded "Esplanade" featuring wide walks and steps for sand-free recreation. The 4,298 foot esplanade stretched from the Cliff House to Lincoln Way, flanked by the new 3-mile-long shoreline expressway known as the Great Highway.



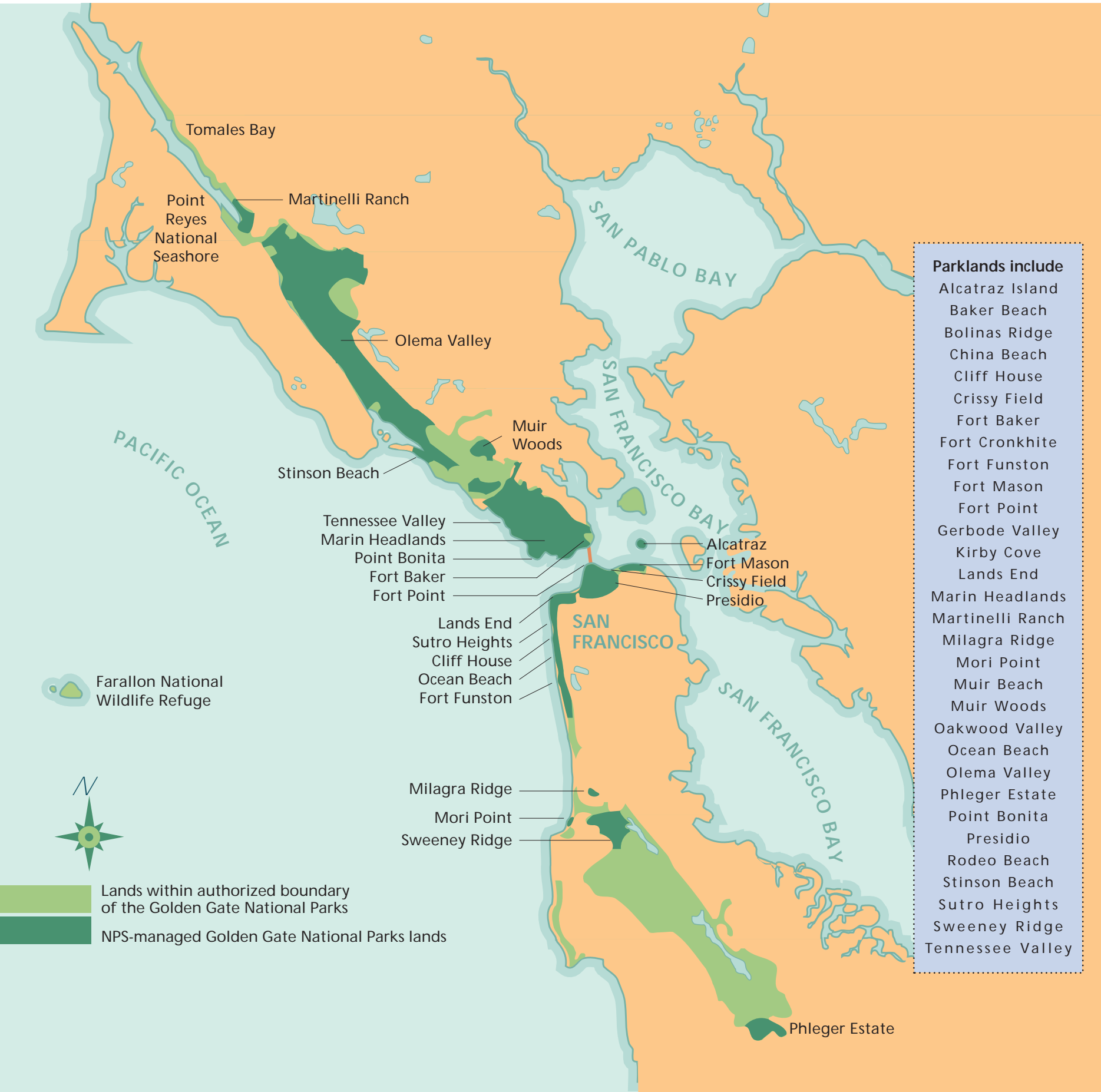
A ca. 1890s view of Ocean Beach from Sutro Heights. (PARC)

These projects dramatically altered the natural dune system at the ocean's edge, and completed the transformation of the city's early wilderness of "Outside Lands" into urban neighborhoods and beachfront hard-scape.

alike could turn their insides out by shooting the "Chutes" (a boat-and-slide combo) or riding the Big Dipper roller coaster. The fainter of heart raced bumper cars, rode the merry-go-round, slurped Its-Its ice cream sandwiches, giggled at Laughing Sal, practiced rifle shooting, negotiated the mirror maze, or danced and ate 50-cent chicken at Topsy's Roost, which was entered via a steep slide.

Excerpted from *A Day at the Seaside*, by Ariel Rubissow Okamoto, published by Golden Gate National Parks Association.

# The National Parks at the Golden Gate



## Golden Gate National Recreation Area (GGNRA)

This 75,500-acre national park is located where the Pacific Ocean meets San Francisco Bay. Extending north and south of the Golden Gate, the park offers a spectacular blend of natural beauty, historic features, open space, and urban development as well as a vast coastal preserve along its shoreline. Muir Woods National Monument, Fort Point National Historic Site, and the Presidio of San Francisco are within GGNRA's boundaries and are managed as part of GGNRA.

**EMERGENCY (POLICE, FIRE, AMBULANCE). . . 911**

**Park Visitor/Information Centers**  
(area code 415 unless otherwise noted)

**Crissy Field** . . . . . 561-7761 (Center)  
or 561-3040 (Warming Hut)

**Fort Funston** . . . . . 239-2366

**Fort Mason/GGNRA Headquarters**  
(Monday–Friday) . . . . . 561-4700  
TDD/V . . . . . 556-2766

**Fort Point** . . . . . 556-1693  
TDD . . . . . 561-4399

**Marin Headlands** . . . . . 331-1540

**Muir Woods** . . . . . 388-2596

**Pacifica** . . . . . (650) 355-4122

**Presidio** . . . . . 561-4323  
TTY . . . . . 561-4314

If the park destination you wish to visit or learn more about does not have a corresponding phone number listed on this page, please phone GGNRA Headquarters at 556-4700 (Monday through Friday) and park staff will assist you.

**ADDITIONAL USEFUL NUMBERS**  
(area code 415 unless otherwise noted)

**Alcatraz Program Information** . . . . . 561-4900

**Camping Reservations** . . . . . 331-1540 (backcountry sites)  
or 800-365-2267 (Kirby Cove)

**Crissy Field Center** . . . . . 561-7690

**Fort Mason Center** . . . . . 441-3400

**Golden Gate National Parks Association**  
. . . . . 561-3000

**Golden Gate Park** . . . . . 751-2766

**Golden Gate Raptor Observatory** . . . 331-0730

**Gulf of the Farallones National Marine Sanctuary** . . . . . 561-6625

**Hyde Street Pier** . . . . . 556-6435

**J. Porter Shaw Memorial Library** . . . 561-7080

**NPS Volunteer Information** . . . . . 561-4755

**Nike Missile Site** . . . . . 331-1453

**Park Archives and Records Center** . . 561-4807

**Point Reyes National Seashore** . . . 464-5100

**Presidio Habitat Restoration Team** . . 561-4848

**San Francisco Maritime National Historic Park, National Maritime Museum** . . 561-7100

**Special Park Uses Group** . . . . . 561-4300

**Stinson Beach Weather** . . . . . 868-1922

**NATIONAL PARKS ON THE INTERNET**

**Golden Gate National Recreation Area**  
. . . . . [www.nps.gov/goga](http://www.nps.gov/goga)

**Alcatraz** . . . . . [www.nps.gov/alcatraz](http://www.nps.gov/alcatraz)

**Fort Point** . . . . . [www.nps.gov/fopo](http://www.nps.gov/fopo)

**Muir Woods** . . . . . [www.nps.gov/muwo](http://www.nps.gov/muwo)

**Nike Missile Site**  
. . . . . [www.nps.gov/goga/mahe/nimi](http://www.nps.gov/goga/mahe/nimi)

**Presidio** . . . . . [www.nps.gov/prsf](http://www.nps.gov/prsf)

**ADDITIONAL PARK-RELATED SITES**

**Crissy Field Center** . . . . . [www.crissyfield.org](http://www.crissyfield.org)

**Golden Gate Club** . [www.goldengateclub.com](http://www.goldengateclub.com)

**Golden Gate National Parks Association**  
. . . . . [www.ggnpa.org](http://www.ggnpa.org)

**Golden Gate Raptor Observatory**  
. . . . . [www.ggro.org](http://www.ggro.org)

**Gulf of the Farallones National Marine Sanctuary** . . . . . [www.farallones.org](http://www.farallones.org)

**Presidio Trust** . . . . . [www.presidiotrust.org](http://www.presidiotrust.org)

The National Park Service Web page at [www.nps.gov](http://www.nps.gov) includes ParkNet, an online magazine providing natural and cultural history, travel and tourism information, and basic information on all national park sites.

**GULF OF THE FARALLONES NATIONAL MARINE SANCTUARY**

The sanctuary comprises 948 square nautical miles of the Pacific Ocean off the California coastline, west and north of San Francisco and includes the Gulf of the Farallones and the nearshore waters of Bodega, Tomales, and Drakes bays, Estero de San Antonio, Estero Americano, Duxbury Reef, and Bolinas Lagoon. It is managed by the National Oceanic and Atmospheric Administration (NOAA) and provides special protection and management for marine areas of national significance, for the benefit of the public and the world's oceans.

**Read ParkNews on the Web:**  
[www.nps.gov/goga/parknews](http://www.nps.gov/goga/parknews)